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## SEQUENCE LISTING

<110> ABBOTT, Catherine Anne  
GORRELL, Mark Douglas

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<150> AU PQ5709

<151> 2000-02-18

<150> AU PQ2762

<151> 1999-09-10

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 Lys Phe Pro Ser Glu Pro Asn Arg Leu Leu Leu Leu His Gly Phe Leu  
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 Asp Glu Asn Val His Phe Ala His Thr Ser Ile Leu Leu Ser Phe Leu  
 820 825 830  
 Val Arg Ala Gly Lys Pro Tyr Asp Leu Gln Ile Tyr Pro Gln Glu Arg  
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 His Ser Ile Arg Val Pro Glu Ser Gly Glu His Tyr Glu Leu His Leu  
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&lt;211&gt; 3120

&lt;212&gt; DNA

&lt;213&gt; Homo Sapiens

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 Ile Tyr Gly Gly Pro Gln Gly Gln Ile Glu Ile Asp Asp Gln Val Glu  
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 Val Gly Ile His Gly Trp Ser Tyr Gly Gly Tyr Leu Ser Leu Met Ala  
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 Leu Met Gln Arg Ser Asp Ile Phe Arg Val Ala Ile Ala Gly Ala Pro  
 180 185 190  
 Val Thr Leu Trp Ile Phe Tyr Asp Thr Gly Tyr Thr Glu Arg Tyr Met  
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 Met Gln Ala Glu Lys Phe Pro Ser Glu Pro Asn Arg Leu Leu Leu Leu  
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 His Gly Phe Leu Asp Glu Asn Val His Phe Ala His Thr Ser Ile Leu  
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 Leu Ser Phe Leu Val Arg Ala Gly Lys Pro Tyr Asp Leu Gln Ile Tyr  
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 Pro Gln Glu Arg His Ser Ile Arg Val Pro Glu Ser Gly Glu His Tyr  
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 Glu Leu His Leu Leu His Tyr Leu Gln Glu Asn Leu Gly Ser Arg Ile  
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 Ala Ala Leu Lys Val Ile  
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&lt;211&gt; 1197

&lt;212&gt; DNA

&lt;213&gt; Homo Sapiens

&lt;400&gt; 4

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&lt;211&gt; 465

&lt;212&gt; PRT

&lt;213&gt; Homo Sapiens

&lt;400&gt; 5

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35          40          45
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Ser Gln Thr Arg Leu Gln Ile Val Leu Ile Ser Pro Glu Leu Phe Ile
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Pro Val Glu Asp Asp Val Met Glu Arg Gln Arg Leu Ile Glu Ser Val
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Pro Asp Ser Val Thr Pro Leu Ile Ile Tyr Glu Glu Thr Thr Asp Ile
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Trp Ile Asn Ile His Asp Ile Phe His Val Phe Pro Gln Ser His Glu
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His Leu Tyr Lys Ile Thr Ser Ile Leu Lys Glu Ser Lys Tyr Lys Arg
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Ser Ser Gly Gly Leu Pro Ala Pro Ser Asp Phe Lys Cys Pro Ile Lys
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Glu Glu Ile Ala Ile Thr Ser Gly Glu Trp Glu Val Leu Gly Arg His
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195          200          205
Gly Thr Lys Asp Ser Pro Leu Glu His His Leu Tyr Val Val Ser Tyr
210          215          220
Val Asn Pro Gly Glu Val Thr Arg Leu Thr Asp Arg Gly Tyr Ser His
225          230          235          240
Ser Cys Cys Ile Ser Gln His Cys Asp Phe Phe Ile Ser Lys Tyr Ser
245          250          255
Asn Gln Lys Asn Pro His Cys Val Ser Leu Tyr Lys Leu Ser Ser Pro

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Phe Glu	Ser Thr Thr Gly Phe Thr Leu Tyr Gly Met Leu Tyr Lys Pro				
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His Asp	Leu Gln Pro Gly Lys Lys Tyr Pro Thr Val Leu Phe Ile Tyr				
	325	330	335		
Gly Gly	Pro Gln Val Ala Ile Ala Gly Ala Pro Val Thr Leu Trp Ile				
	340	345	350		
Phe Tyr	Asp Thr Gly Tyr Thr Glu Arg Tyr Met Gly His Pro Asp Gln				
	355	360	365		
Asn Glu	Gln Gly Tyr Tyr Leu Gly Ser Val Ala Met Gln Ala Glu Lys				
	370	375	380		
Phe Pro	Ser Glu Pro Asn Arg Leu Leu Leu Leu His Gly Phe Leu Asp				
385	390	395	400		
Glu Asn	Val His Phe Ala His Thr Ser Ile Leu Leu Ser Phe Leu Val				
	405	410	415		
Arg Ala	Gly Lys Pro Tyr Asp Leu Gln Ile Tyr Pro Gln Glu Arg His				
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Ser Ile	Arg Val Pro Glu Ser Gly Glu His Tyr Glu Leu His Leu Leu				
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His Tyr	Leu Gln Glu Asn Leu Gly Ser Arg Ile Ala Ala Leu Lys Val				
	450	455	460		
Ile					
465					

&lt;210&gt; 6

&lt;211&gt; 1669

&lt;212&gt; DNA

&lt;213&gt; Homo Sapiens

&lt;400&gt; 6

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- 8 -

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&lt;210&gt; 7

&lt;211&gt; 360

&lt;212&gt; PRT

&lt;213&gt; Homo Sapiens

&lt;400&gt; 7

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 35          40          45
Glu Ser Glu Val Glu Ile Ile His Val Thr Ser Pro Met Leu Glu Thr
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Arg Arg Ala Asp Ser Phe Arg Tyr Pro Lys Thr Gly Thr Ala Asn Pro
 65          70          75          80
Lys Val Thr Phe Lys Met Ser Glu Ile Met Ile Asp Ala Glu Gly Arg
 85          90          95
Ile Ile Val Asp Glu Val Arg Arg Leu Val Tyr Phe Glu Gly Thr Lys
100          105          110
Asp Ser Pro Leu Glu His His Leu Tyr Val Val Ser Tyr Val Asn Pro
115          120          125
Gly Glu Val Thr Arg Leu Thr Asp Arg Gly Tyr Ser His Ser Cys Cys
130          135          140
Ile Ser Gln His Cys Asp Phe Phe Ile Ser Lys Tyr Ser Asn Gln Lys
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Asn Pro His Cys Val Ser Leu Tyr Lys Leu Ser Ser Pro Glu Asp Asp
165          170          175
Pro Thr Cys Lys Thr Lys Glu Phe Trp Ala Thr Ile Leu Asp Ser Ala
180          185          190
Gly Pro Leu Pro Asp Tyr Thr Pro Pro Glu Ile Phe Ser Phe Glu Ser
195          200          205
Thr Thr Gly Phe Thr Leu Tyr Gly Met Leu Tyr Lys Pro His Asp Leu
210          215          220
Gln Pro Gly Lys Lys Tyr Pro Thr Val Leu Phe Ile Tyr Gly Gly Pro
225          230          235          240
Gln Val Gln Leu Val Asn Asn Arg Phe Lys Gly Val Lys Tyr Phe Arg
245          250          255
Leu Asn Thr Leu Ala Ser Leu Gly Tyr Val Val Val Val Ile Asp Asn
260          265          270
Arg Gly Ser Cys His Arg Gly Leu Lys Phe Glu Gly Ala Phe Lys Tyr
275          280          285

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 Leu Ala Ser Arg Tyr Asp Phe Ile Asp Leu Asp Arg Val Gly Ile His  
 305 310 315 320  
 Gly Trp Ser Tyr Gly Gly Tyr Leu Ser Leu Met Ala Leu Met Gln Arg  
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&lt;150&gt; AU PQ5709

&lt;151&gt; 2000-02-18

&lt;160&gt; 8

&lt;170&gt; PatentIn version 3.0

&lt;210&gt; 1

&lt;211&gt; 882

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

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Glu	Pro	Phe	Tyr	Val	Glu	Arg	Tyr	Ser	Trp	Ser	Gln	Leu	Lys	Lys	Leu
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Leu	Ala	Asp	Thr	Arg	Lys	Tyr	His	Gly	Tyr	Met	Met	Ala	Lys	Ala	Pro
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His	Asp	Phe	Met	Phe	Val	Lys	Arg	Asn	Asp	Pro	Asp	Gly	Pro	His	Ser
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Tyr	Gly	Met	Tyr	Ser	Arg	Glu	Glu	Glu	Leu	Leu	Arg	Glu	Arg	Lys	Arg
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Leu	Gln	Glu	Glu	Phe	Asp	Arg	Tyr	Ser	Gly	Tyr	Trp	Trp	Cys	Pro	Lys
			260					265					270		
Ala	Glu	Thr	Thr	Pro	Ser	Gly	Gly	Lys	Ile	Leu	Arg	Ile	Leu	Tyr	Glu
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				325					330					335	
Glu	Gly	Arg	Ile	Ile	Asp	Val	Ile	Asp	Lys	Glu	Leu	Ile	Gln	Pro	Phe
			340					345					350		
Glu	Ile	Leu	Phe	Glu	Gly	Val	Glu	Tyr	Ile	Ala	Arg	Ala	Gly	Trp	Thr
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Pro	Glu	Gly	Lys	Tyr	Ala	Trp	Ser	Ile	Leu	Leu	Asp	Arg	Ser	Gln	Thr
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Asp	Asp	Val	Met	Glu	Arg	Gln	Arg	Leu	Ile	Glu	Ser	Val	Pro	Asp	Ser
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1.ST25.txt

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Ala Ile Thr	Ser Gly Glu Trp Glu 500	Val 505	Leu Gly Arg His	Gly Ser Asn 510
Ile Gln	Val Asp Glu Val Arg Arg 515	Leu Val Tyr Phe	Glu Gly Thr Lys 525	
Asp Ser 530	Pro Leu Glu His His	Leu Tyr Val Val	Ser Tyr Val Asn Pro 540	
Gly Glu Val Thr Arg	Leu Thr Asp Arg Gly 550	Tyr 555	Ser His Ser Cys Cys 560	
Ile Ser Gln His	Cys Asp Phe Phe Ile 565	Ser 570	Lys Tyr Ser Asn Gln Lys 575	
Asn Pro His	Cys Val Ser Leu Tyr Lys 580	Leu Ser Ser	Pro Glu Asp Asp 590	
Pro Thr Cys Lys Thr Lys Glu	Phe Trp Ala Thr Ile Leu Asp Ser Ala 595	600	605	
Gly Pro Leu Pro Asp Tyr Thr	Pro Pro Glu Ile Phe Ser Phe Glu Ser 610	615	620	
Thr Thr Gly Phe Thr Leu Tyr Gly Met Leu Tyr	Lys Pro His Asp Leu 625	630	635	
Gln Pro Gly Lys Lys Tyr Pro Thr Val Leu Phe Ile Tyr Gly Gly Pro	645	650	655	
Gln Val Gln Leu Val Asn Asn Arg Phe Lys Gly Val Lys Tyr Phe Arg	660	665	670	
Leu Asn Thr Leu Ala Ser Leu Gly Tyr Val Val Val Val Ile Asp Asn	675	680	685	
Arg Gly Ser Cys His Arg Gly Leu Lys Phe Glu Gly Ala Phe Lys Tyr	690	695	700	
Lys Met Gly Gln Ile Glu Ile Asp Asp Gln Val Glu Gly Leu Gln Tyr	705	710	715	720
Leu Ala Ser Arg Tyr Asp Phe Ile Asp Leu Asp Arg Val Gly Ile His	725	730	735	
Gly Trp Ser Tyr Gly Gly Tyr Leu Ser Leu Met Ala Leu Met Gln Arg	740	745	750	

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1.ST25.txt

Ser Asp Ile Phe Arg Val Ala Ile Ala Gly Ala Pro Val Thr Leu Trp  
755 760 765

Ile Phe Tyr Asp Thr Gly Tyr Thr Glu Arg Tyr Met Gly His Pro Asp  
770 775 780

Gln Asn Glu Gln Gly Tyr Tyr Leu Gly Ser Val Ala Met Gln Ala Glu  
785 790 795 800

Lys Phe Pro Ser Glu Pro Asn Arg Leu Leu Leu Leu His Gly Phe Leu  
805 810 815

Asp Glu Asn Val His Phe Ala His Thr Ser Ile Leu Leu Ser Phe Leu  
820 825 830

Val Arg Ala Gly Lys Pro Tyr Asp Leu Gln Ile Tyr Pro Gln Glu Arg  
835 840 845

His Ser Ile Arg Val Pro Glu Ser Gly Glu His Tyr Glu Leu His Leu  
850 855 860

Leu His Tyr Leu Gln Glu Asn Leu Gly Ser Arg Ile Ala Ala Leu Lys  
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tccgggctggg gccgggggga aggaaaatgc aacatggcag cagcaatgga aacagaacag  
240

ctgggtgttg agatatttga aactgcggac tgtgaggaga atattgaatc acaggatcgg  
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cctaaattgg agccttttta tggtgagcgg tattcctgga gtcagcttaa aaagctgctt  
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1.ST25.txt

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gcagtcttaa tgctctcttg gaagcctctt ttggatcttt ttcaggcaac actggactat  
600

ggaatgtatt ctcgagaaga agaactatta agagaaagaa aacgcattgg aacagtcgga  
660

attgcttctt acgattatca ccaaggaagt ggaacatttc tgtttcaagc cggtagtgga  
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840

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900

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960

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1020

tgtccaaaag ctgaaacaac tcccagtggt ggtaaaattc ttagaattct atatgaagaa  
1080

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1140

gcagattcat tccgttatcc taaaacaggt acagcaaata ctaaagtcac ttttaagatg  
1200

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1260

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2640

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## 1.ST25.txt

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2760

agcataagag ttcctgaatc gggagaacat tatgaactgc atcttttgca ctaccttcaa  
2820

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2880

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2940

attgatcatc acattttgat acctgccatg taacatctac tctgaaaat aaatgtggtg  
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Ser	His	Ser	Cys	Cys	Ile	Ser	Gln	His	Cys	Asp	Phe	Phe	Ile	Ser	Lys	35	40	45	
Tyr	Ser	Asn	Gln	Lys	Asn	Pro	His	Cys	Val	Ser	Leu	Tyr	Lys	Leu	Ser	50	55	60	
Ser	Pro	Glu	Asp	Asp	Pro	Thr	Cys	Lys	Thr	Lys	Glu	Phe	Trp	Ala	Thr	65	70	75	80
Ile	Leu	Asp	Ser	Ala	Gly	Pro	Leu	Pro	Asp	Tyr	Thr	Pro	Pro	Glu	Ile	85	90	95	
Phe	Ser	Phe	Glu	Ser	Thr	Thr	Gly	Phe	Thr	Leu	Tyr	Gly	Met	Leu	Tyr	100	105	110	
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Val Gly Ile His Gly Trp Ser Tyr Gly Gly Tyr Leu Ser Leu Met Ala 165 170 175		
Leu Met Gln Arg Ser Asp Ile Phe Arg Val Ala Ile Ala Gly Ala Pro 180 185 190		
Val Thr Leu Trp Ile Phe Tyr Asp Thr Gly Tyr Thr Glu Arg Tyr Met 195 200 205		
Gly His Pro Asp Gln Asn Glu Gln Gly Tyr Tyr Leu Gly Ser Val Ala 210 215 220		
Met Gln Ala Glu Lys Phe Pro Ser Glu Pro Asn Arg Leu Leu Leu Leu 225 230 235 240		
His Gly Phe Leu Asp Glu Asn Val His Phe Ala His Thr Ser Ile Leu 245 250 255		
Leu Ser Phe Leu Val Arg Ala Gly Lys Pro Tyr Asp Leu Gln Ile Tyr 260 265 270		
Pro Gln Glu Arg His Ser Ile Arg Val Pro Glu Ser Gly Glu His Tyr 275 280 285		
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Gln Pro Phe Glu Ile Leu Phe Glu Gly Val Glu Tyr Ile Ala Arg Ala
          35          40          45

Gly Trp Thr Pro Glu Gly Lys Tyr Ala Trp Ser Ile Leu Leu Asp Arg
50          55          60

Ser Gln Thr Arg Leu Gln Ile Val Leu Ile Ser Pro Glu Leu Phe Ile
65          70          75          80

Pro Val Glu Asp Asp Val Met Glu Arg Gln Arg Leu Ile Glu Ser Val
          85          90          95

Pro Asp Ser Val Thr Pro Leu Ile Ile Tyr Glu Glu Thr Thr Asp Ile
          100          105          110

Trp Ile Asn Ile His Asp Ile Phe His Val Phe Pro Gln Ser His Glu
          115          120          125

Glu Glu Ile Glu Phe Ile Phe Ala Ser Glu Cys Lys Thr Gly Phe Arg
          130          135          140

His Leu Tyr Lys Ile Thr Ser Ile Leu Lys Glu Ser Lys Tyr Lys Arg
145          150          155          160

Ser Ser Gly Gly Leu Pro Ala Pro Ser Asp Phe Lys Cys Pro Ile Lys
          165          170          175

Glu Glu Ile Ala Ile Thr Ser Gly Glu Trp Glu Val Leu Gly Arg His
          180          185          190

Gly Ser Asn Ile Gln Val Asp Glu Val Arg Arg Leu Val Tyr Phe Glu
          195          200          205

Gly Thr Lys Asp Ser Pro Leu Glu His His Leu Tyr Val Val Ser Tyr
210          215          220

Val Asn Pro Gly Glu Val Thr Arg Leu Thr Asp Arg Gly Tyr Ser His
225          230          235          240

Ser Cys Cys Ile Ser Gln His Cys Asp Phe Phe Ile Ser Lys Tyr Ser
          245          250          255

Asn Gln Lys Asn Pro His Cys Val Ser Leu Tyr Lys Leu Ser Ser Pro
          260          265          270

Glu Asp Asp Pro Thr Cys Lys Thr Lys Glu Phe Trp Ala Thr Ile Leu
          275          280          285

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PCT/AU00/01085

1.ST25.txt

Asp Ser Ala Gly Pro Leu Pro Asp Tyr Thr Pro Pro Glu Ile Phe Ser  
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Phe Glu Ser Thr Thr Gly Phe Thr Leu Tyr Gly Met Leu Tyr Lys Pro  
305 310 315 320

His Asp Leu Gln Pro Gly Lys Lys Tyr Pro Thr Val Leu Phe Ile Tyr  
325 330 335

Gly Gly Pro Gln Val Ala Ile Ala Gly Ala Pro Val Thr Leu Trp Ile  
340 345 350

Phe Tyr Asp Thr Gly Tyr Thr Glu Arg Tyr Met Gly His Pro Asp Gln  
355 360 365

Asn Glu Gln Gly Tyr Tyr Leu Gly Ser Val Ala Met Gln Ala Glu Lys  
370 375 380

Phe Pro Ser Glu Pro Asn Arg Leu Leu Leu Leu His Gly Phe Leu Asp  
385 390 395 400

Glu Asn Val His Phe Ala His Thr Ser Ile Leu Leu Ser Phe Leu Val  
405 410 415

Arg Ala Gly Lys Pro Tyr Asp Leu Gln Ile Tyr Pro Gln Glu Arg His  
420 425 430

Ser Ile Arg Val Pro Glu Ser Gly Glu His Tyr Glu Leu His Leu Leu  
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Ile  
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180

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PCT/AU00/01085

1.ST25.txt

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420

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780

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900

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960

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1080

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1140

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1200

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1260

gccatatgat ttacagatct atcctcagga gagacacagc ataagagttc ctgaatcggg  
1320

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PCT/AU00/01085

1.ST25.txt

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1560

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Thr	Pro	Ser	Gly	Gly	Lys	Ile	Leu	Arg	Ile	Leu	Tyr	Glu	Glu	Asn	Asp	35	40	45	
Glu	Ser	Glu	Val	Glu	Ile	Ile	His	Val	Thr	Ser	Pro	Met	Leu	Glu	Thr	50	55	60	
Arg	Arg	Ala	Asp	Ser	Phe	Arg	Tyr	Pro	Lys	Thr	Gly	Thr	Ala	Asn	Pro	65	70	75	80
Lys	Val	Thr	Phe	Lys	Met	Ser	Glu	Ile	Met	Ile	Asp	Ala	Glu	Gly	Arg	85	90	95	
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Asp	Ser	Pro	Leu	Glu	His	His	Leu	Tyr	Val	Val	Ser	Tyr	Val	Asn	Pro	115	120	125	
Gly	Glu	Val	Thr	Arg	Leu	Thr	Asp	Arg	Gly	Tyr	Ser	His	Ser	Cys	Cys	130	135	140	
Ile	Ser	Gln	His	Cys	Asp	Phe	Phe	Ile	Ser	Lys	Tyr	Ser	Asn	Gln	Lys	145	150	155	160

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PCT/AU00/01085

1.ST25.txt

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			180					185					190		
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225					230					235					240
Gln	Val	Gln	Leu	Val	Asn	Asn	Arg	Phe	Lys	Gly	Val	Lys	Tyr	Phe	Arg
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Leu	Asn	Thr	Leu	Ala	Ser	Leu	Gly	Tyr	Val	Val	Val	Val	Ile	Asp	Asn
			260					265					270		
Arg	Gly	Ser	Cys	His	Arg	Gly	Leu	Lys	Phe	Glu	Gly	Ala	Phe	Lys	Tyr
		275					280					285			
Lys	Met	Gly	Gln	Ile	Glu	Ile	Asp	Asp	Gln	Val	Glu	Gly	Leu	Gln	Tyr
	290					295					300				
Leu	Ala	Ser	Arg	Tyr	Asp	Phe	Ile	Asp	Leu	Asp	Arg	Val	Gly	Ile	His
305					310					315					320
Gly	Trp	Ser	Tyr	Gly	Gly	Tyr	Leu	Ser	Leu	Met	Ala	Leu	Met	Gln	Arg
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Ser	Asp	Ile	Phe	Arg	Val	Ala	Ile	Ala	Gly	Ala	Pro	Val	Thr	Leu	Trp
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## 1.ST25.txt

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gga  
1083